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TITLE: RUBBER COMPOSITION FOR
TIRE TREAD IMPROVED IN
PROCESSIBILITY
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INVENTOR-INFORMATION:

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ABSTRACT:

PROBLEM TO BE SOLVED: To improve the processibility of a silica-loaded vulcanizable rubber compsn. without detriment to the characteristics inherent in the compsn., such as low heat build-up properties and abrasion resistance, by compounding a diene rubber with silica and a polysiloxane obtd. by the condensation of an alkoxy silane contg. at least one compd. selected from among five compds.

SOLUTION: This compsn. contains 100 pts.wt. diene rubber, 5-80 pts.wt. silica, and a polysiloxane obtd. by the condensation of an alkoxysilane contg. at least 60 wt.% at least one compd. selected from among compds. represented by formulas 1 to IV (wherein R1 is methyl or ethyl; Me is methyl; and Ph is phenyl). When not only alkoxysilyl groups which bond to silanol groups present on the surface of silica but also functional groups which chemically bond to a rubber are bonded to the polysiloxane in advance, more effective bonding between a rubber and silica is achieved. The polysiloxane used essentially has alkoxysilyl groups and hydrophobic groups.

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